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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------|------------------|
| 09/859,576   | 06/15/2001  | Shinya Kadono        | HYAE:077A                    | 4313             |
| 27890  | 7590        | 09/06/2006           |                              |                  |
| STEPTOE & JOHNSON LLP<br>1330 CONNECTICUT AVENUE, N.W.<br>WASHINGTON, DC 20036 |             |                      | EXAMINER<br>CALLAHAN, PAUL E |                  |
|  |             |                      | ART UNIT                     | PAPER NUMBER     |
|  |             |                      | 2137                         |                  |

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/859,576

Applicant(s)

KADONO, SHINYA

Examiner

Paul Callahan

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-14, 35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7, 8, 13, 14, 35 and 36 is/are allowed.
- 6) ☐ Claim(s) 5, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6-29-06 has been entered.

2. Claims 1-8, 11-14, 35 and 36 are pending in the application and have been examined.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-8, 11-14, 35 and 36 have been considered, and, when taken together with the changes made to the language of the claims via the latest amendment, are sufficient to overcome the rejections of those claims as found in the previous Office Action. However, with respect to claims 5, 11, and 12, this is a moot point in view of the new ground(s) of rejection presented infra.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

Claim 11 contains limitations directed to an apparatus, for example where an apparatus comprising first and second embedding means are recited. As per 35 USC 112 4<sup>th</sup> Paragraph, claim 11 must also recite all of the limitations of claim 1 from which it depends. Therefore claim 11 also contains the limitations found in claim 1 that are method steps for the use of the apparatus recited in claim 11. For example, claim 11 recites an apparatus comprising a first embedding means that is employed to carry out the method step recited in claim 1 of embedding secret information in a first signal component. For example, claim 11 also recites the apparatus also comprises a second embedding means that is employed to carry out the method step recited in claim 1 of embedding position information in a second signal component. Therefore claim 11 recites both an apparatus and the method steps of using it.

Claim 12 is dependent on claim 11 and is rejected on that basis. See MPEP Sec. 2173.05:

## **II. PRODUCT AND PROCESS IN THE SAME CLAIM**

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990), a claim directed to an automatic transmission workstand and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph. Such claims should also be rejected under 35 U.S.C. 101 based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* at 1551.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 11 and 12 are rejected under 35 U.S.C. 101 because the claims recite limitations directed towards more than one statutory class of invention.

Claim 11 recites limitations directed towards an both apparatus and method steps for its use. Under 35 USC 112 4<sup>th</sup> paragraph, claim 11 must also incorporate all of the limitations of claim 1. Therefore, as discussed supra in the rejection of claim 11 under 35 USC 112 2<sup>nd</sup> Paragraph, claim 11 recites limitations directed to both an apparatus and method steps for its use. Such a claim is non-statutory under 35 USC 101. See MPEP 2173.05.

Claim 12 contains all of the limitations of claim 1 and claim 11 by virtue of 23 USC 112 4<sup>th</sup> paragraph and is nonstatutory under 35 USC 101 for the same reasons discussed supra for claim 11.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claim 5 is rejected under 35 U.S.C. 102(a) as being clearly anticipated by Powell et al., US 5,721,788.

Powell teaches a method for embedding secret information in an input signal (Abstract, col. 1 lines 54-60, col. 2 lines 33-35: Powell teaches the embedding of “image signatures” within a visual image), comprising the steps of: embedding said secret information in a prescribed position in an said input signal (col. 1 lines 54 through col. 2 line 3, col. 2 lines 33-42, col. 3 lines 35-67); and embedding position information, which specifies the position where said secret information is embedded, in position in said input signal different from said prescribed position (col. 5 lines 21-28: The signature is taught as being “stored” by associating the bit value of each signature point with the x-y coordinates of the signature point, and then further “as part of the signed image” .

***Allowable Subject Matter***

9. Claims 1-4, 7, 8, 13, 14, 35, and 36 are allowed.

10. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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11. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art in the field, Powell et al., US 5,721,788, does not teach the combination of features as set forth in the independent claims of;

As per claim 1: embedding secret information in a first signal component, and embedding position information specifying the position of the secret information, in a second signal component, where the components are different signal components of a color image signal,

As per claim 2, embedding secret information in a prescribed position of a luminance signal of a color image signal, and embedding information specifying the position of the secret information in a color difference signal of a color image signal,

As per claim 13, first and second means used to embed the secret information and the position information into first and second signal components respectively,

As per claim 6, the method of claim 5 wherein the second embedded position information is used to extract the first embedded secret information.

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***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

8-29-06

Paul Callahan

A handwritten signature in cursive script that reads "Paul Callahan".